UNITED ZINC #1 IOLA, ALLEN COUNTY, KANSAS
RDT MEETING MAY 31, 2006

Site Background:

The discovery and use of natural gas in the early 1900s led to the development of zinc and lead smelting operations in southeast Kansas. The United Zinc #1 Site, located in Iola, Kansas, was one of several zinc and lead smelting operations in the area. The site was owned by United Zinc and Chemical Company from 1902 - 1925, and smelting occurred from approximately 1902 – 1912. Historical records indicate that the Site originally housed machinery and buildings for the lead smelting operations. All on-site smelter facilities have been removed, and the property has been graded, leveled, and developed since the 1920s. The Site covers approximately 17 acres and includes ten separate parcels of land.

The KDHE conducted investigations on two separate dates; the first took place in December of 2003 and the second in December of 2004. The investigations showed elevated levels of lead and arsenic at the former smelter site and the outlying community. KDHE submitted a request for federal action dated September 28, 2005 based on their findings.

The remaining undeveloped smelter area is currently owned by Mr. Burnett and Mr. Dietrich. Both are planning commercial development and possibly selling portions of their lots respectively. Issues have not been discussed regarding liability in these areas. - coordinate w/ KDHE

EPA Summary of Activities:

On April 4, 2006, EPA, KDHE, and City of Iola administrators conducted a community meeting addressing the concerns and future plans. Approximately 25 people attended.

In late April 2006, EPA began screening properties surrounding the smelter. Approximately 260 homes, day-cares, schools, and commercial areas were screened. Properties were screened at locations throughout the city to identify trends or potential pathways of contamination. KDHE believed that contamination exposures followed wind patterns common to the area. However, EPA's results showed elevated concentrations throughout the city, with the higher concentrations prevailing in older neighborhoods. Anecdotal information from long-time residents indicates slag material from the smelter was a source of material for fill in homes, side-walks, drive-ways, etc.

EPA requested elevated blood lead (EBL) information for the Allen County Health Department. As of May 18, 2006, 14 children, primarily students of McKinley Elementary School were screened for EBL levels. Of the 14, 1 child had elevated levels. That person's residential property showed results of 816 parts per million (ppm) of lead in the soil.

Screening Results and Summary:

United Zinc #1	
# of Homes Sampled	**259**
~# of Total Homes	**3000**
Estimated Cost/Home	**$10,000.00**

Day-cares, Schools, Churches to date > 400	10
% of Total	0.039
Cost	$100,000.00

>1200 ppm & EBL	
# of Residences to date	4
% of Total	0.015
Extrapolate	46
Cost	$463,320.46
Total Estimation	$563,320.46

> 1000 ppm & EBL	
# of Residences to date	8
% of Total	0.031
Extrapolate	93
Cost	$926,640.93
Total Estimation	$1,026,640.93

> 800 ppm & EBL	
# of Residences to date	12
% of Total	0.046
Extrapolate	139
Cost	$1,389,961.39
Total Estimation	$1,489,961.39

> 600 ppm & EBL	
# of Residences to date	31
% of Total	0.120
Extrapolate	359
Cost	$3,590,733.59
Total Estimation	$3,690,733.59

> 400 ppm & EBL	
# of Residences to date	59
% of Total	0.228
Extrapolate	683
Cost	$6,833,976.83
Total Estimation	$6,933,976.83

* Time Critical (TC)- includes day-cares, schools, and churches over 400 ppm; residences over 1200 ppm; and residential yards over 400ppm with a child under the age of 6 with a blood lead level greater than 10 µg/dL.

We assume that we will not find a significant additional number of churches, schools, or day-cares with high concentrations of lead.

lead bioavailability - IEBK model

KDHE: list site for 400

or

only clean